

How to connect ETREL INCH Pro and Core EV chargers with Reduxi controller

Connect an Etrei INCH Pro or INCH Core charger to the Reduxi Controller over Wi-Fi with OCPP 1.6 JSON and add it in the Configurator.

🕒 approx. 20–30 min

🔧 Etrei INCH Pro / Core · Reduxi Controller

🌐 OCPP 1.6 JSON (Wi-Fi) 📶 EV charger



Text description of this image

Photo of a wall-mounted EV charger on a dark grey post, shown on a white background. The housing is dark

Etrei INCH Pro charger

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1 Technical documentation

The Etrel **INCH Pro** and **INCH Core** chargers are connected to Reduxi over Wi-Fi with the **OCPP 1.6 (JSON)** protocol. The charger connects as a client to the OCPP server of the Reduxi Controller. In the charger you enter the server URL that the controller generates, and in Reduxi you enter the charge point identity of the charger.

DEVICE TYPE
EV charger

REDUXI TYPE
OCPP 1.6 – JSON

PROTOCOL
OCPP 1.6 JSON over
Wi-Fi

SERVER URL
Generated by the
Reduxi Controller,
e.g.
ws://192.168.1.200/ocpp

DEVICE IDENTIFIER
Charge point
identity of the
charger

CHARGER SETUP
Browser (INCH Pro)
or INCH Core app

Manufacturer documents:

- [Etre website](#) – product information and contact (web, EN)
- [Etre downloads](#) – datasheets, manuals and other documents (web, EN)

2 Required equipment

- ☐ Reduxi Controller (installed and online)
- ☐ Etre INCH Pro or INCH Core charger, installed and connected to your Wi-Fi network
- ☐ Charger and Reduxi Controller in the same network
- ☐ INCH Pro: a computer with a web browser. INCH Core: a smartphone with the INCH Core app
- ☐ Admin access to the charger (see the note below)
- ☐ Laptop or tablet with internet access to configure the device in Reduxi



Admin access to the charger

The admin user name and password of the charger are hidden parameters. They are provided during the installation for a specific location. If you need them, contact support@reduxi.zendesk.com and the support team will provide them.

3 System overview & wiring

The charger and the Reduxi Controller communicate over the local network. The charger connects to your Wi-Fi and opens the OCPP connection to the controller.

CONNECTION	FROM	TO	NOTE
LAN	Reduxi Controller	Router / switch	Same network as the charger
Wi-Fi	Etre INCH charger	Router	Needed before the OCPP settings can be made
OCPP 1.6 JSON	Etre INCH charger (client)	Reduxi Controller (server)	Server URL generated by the controller, see Point 6.2



Use a fixed IP address

Give the Reduxi Controller a fixed IP address or a DHCP reservation. The OCPP server URL contains the address of the controller, so the charger loses the connection if it changes.

4 Configure the charger

4.1 INCH Pro: OCPP settings in the browser

Once the charger is connected to your Wi-Fi, you can open it directly: enter the IP address of the charger in a browser (example: `192.168.1.250`) and log in with the admin access of the charger.

1 Open Connectivity

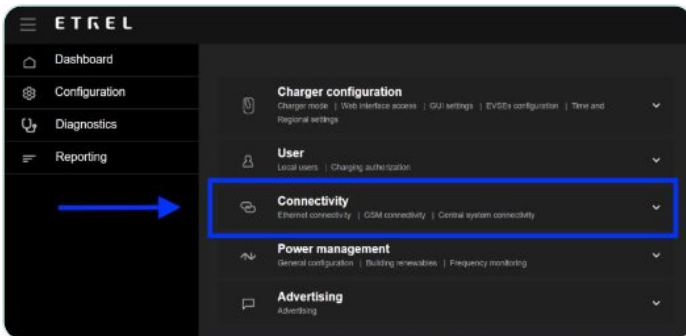
In the charger interface, open the **Connectivity** section.

2 Enter the backend server

Paste the Reduxi server URL into the backend server field. You get the URL from the communication channel in Reduxi, see [Point 6.2](#).

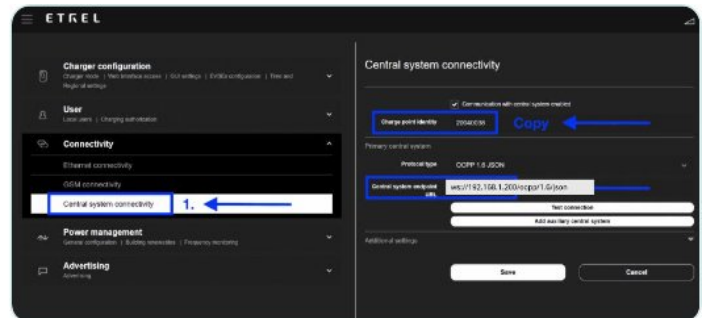
3 Copy the charge point identity

Copy the **charge point identity** of the charger. You need it as device identifier in Reduxi, see [Point 6.2](#).



Text description of this image

Screenshot of the ETREL charger web interface, dark theme page Connectivity section



2. Text description of this image

Screenshot of the ETREL charger web interface, dark theme page Central system connectivity. Left: menu

4.2 INCH Core: access password in the app

The INCH Core charger creates its own access point. To set it up, the front cover of the charger must be removed, then the access point is created automatically. Connect the charger to your Wi-Fi as described in the Etrele documentation (see the Etrele support page in [Point 1](#)).

The **INCH Core** app is available for [Android \(Google Play\)](#) and [iOS \(App Store\)](#).



Text description of this image

App icon of the INCH Core app: white rounded square with a black outline drawing of an oval shape inside a

INCH Core app

1 Connect to the access point

Open the app and connect to the access point of the charger.

2 Open the access password

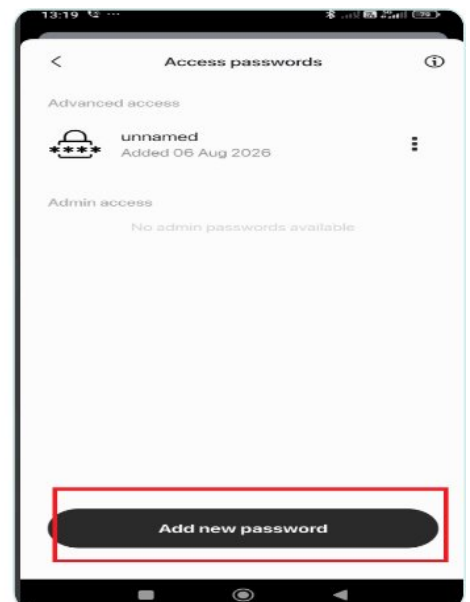
Tap **Manage Access Password**.

3 Set the admin password

Add a new password (admin access).

4 Set the OCPP settings

Enter the Reduxi server URL as described in [Point 4.1](#) and copy the charge point identity.



Text description of this image 2. Text description of this image 3. Text description of this image

Screenshot of a mobile app screen

Connect to the access point

Screenshot of a mobile app screen

Manage Access Password

Screenshot of a phone screen with

Add the admin password



Admin user name and password

The admin user name and password are hidden parameters and are provided during the installation for a specific location. Contact support@reduxi.zendesk.com if you need them.

5 Log in to the Reduxi web interface

The device is added in the **Configurator**, the web interface of the Reduxi Controller. You do not add it in the Reduxi app itself or in the Reduxi Cloud. You can open it in two ways:



Reduxi app

Opens the Configurator through the tunnel connection, from anywhere.

RECOMMENDED



Web browser

In the same network as the controller, via its IP address or `http://reduxi.local`.



5.1 Via the Reduxi app

1

Open the app and log in

Log in with your Reduxi account.

2

Open Reduxi devices

Tap the menu icon top left, then **Reduxi devices**, and select the location.

3

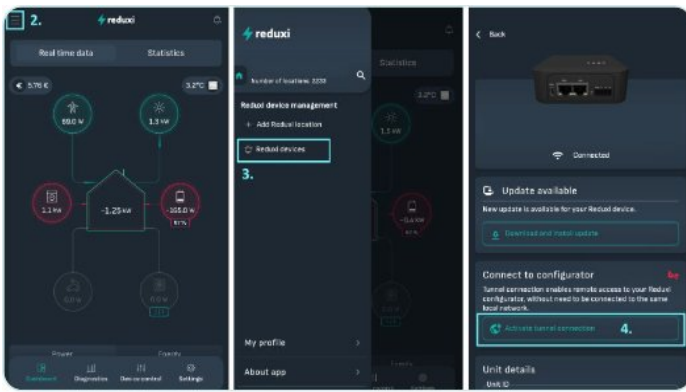
Switch on the tunnel connection

Switch on the tunnel and wait about 30 seconds.

4

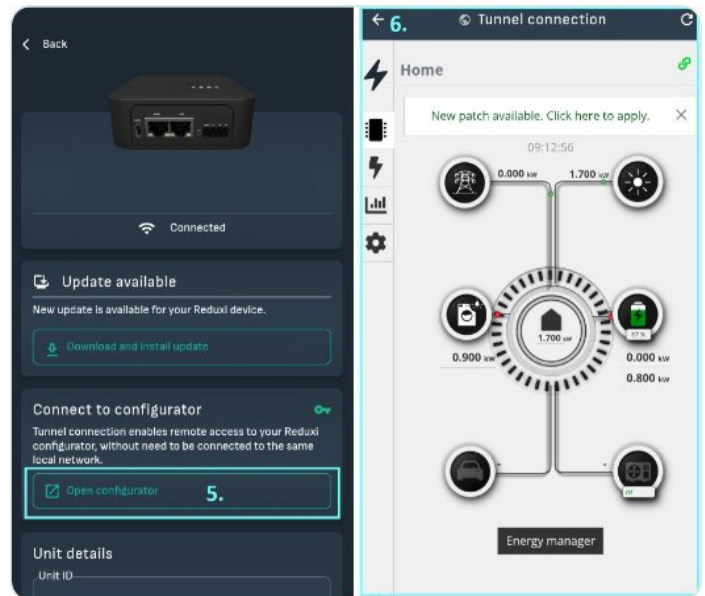
Open the Configurator

Tap **Open configurator**. You are logged in automatically.



Text description of this image

Three phone screenshots of the Reduxi app side by side, dark theme, with light blue markers and step numbers. Left: dashboard with a menu icon marked 2; logo redux; bell icon; tabs Real time data and Statistics; price 5.76 EUR and temperature 3.2 C; energy flow with grid 69.0



2. Text description of this image

Two phone screenshots side by side, both with light blue markers and step numbers. Left: 'Back' screen showing a device image, 'Connected' status, 'Update available' section, and 'Connect to configurator' section with a light blue box around 'Open configurator' marked 5. Right: 'Tunnel connection' screen showing a home screen with a 'New patch available' notification, a central energy flow diagram with values like 0.900 kW, 1.700 kW, and 0.800 kW, and an 'Energy manager' button.



On a computer, away from the site

In the Reduxi Cloud (reduxi.app) open the location, then **Manage location** → **OEM devices** → **Activate tunnel connection**, confirm with **OK** and wait about 30 seconds. Then click **Go to controller**. The Configurator opens in a new tab without a password.

5.2 Via a web browser

1

Open the login page

In the same network, enter the controller's IP address or <http://reduxi.local> . The IP address is in the router's device list or in the app under **Reduxi devices**.

2

Log in

Username **admin** · Password **admin** (factory default). If it was changed during installation, use that one. This is not your Reduxi account password.

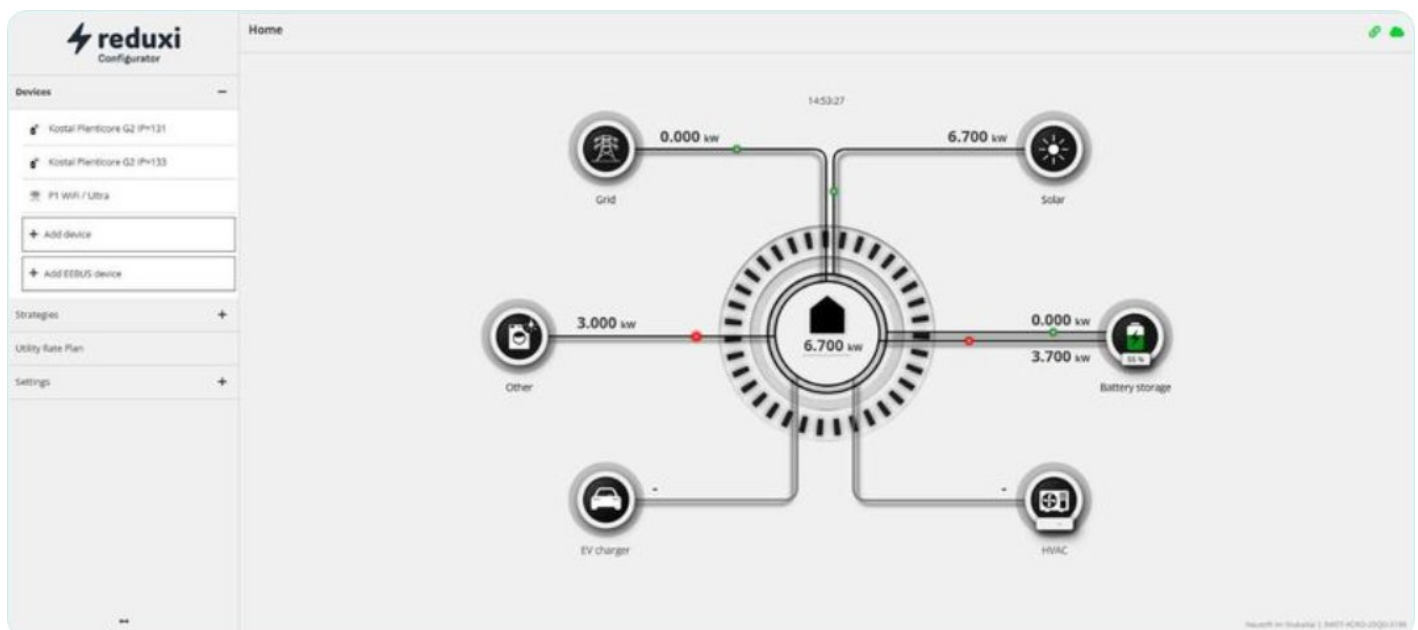


Text description of this image

Screenshot of a browser window showing the Reduxi Configurator login page. The address bar (marked with a

Login screen of the Reduxi Controller

This is what you should see:



Text description of this image

Screenshot of the Reduxi Configurator Home page. Left menu with the redux Configurator logo; section

Configurator home screen with the device list on the left



Common stumbling blocks

The tunnel needs about 30 seconds before the Configurator opens. The **admin** login is not your Reduxi account. **reduxi.local** only works in the same network as the controller.

6 Add the device to Reduxi

Open the Configurator first, see [Point 5](#). The OCPP connection works only when the charger and Reduxi use the same identity and server URL.

6.1 Basic settings

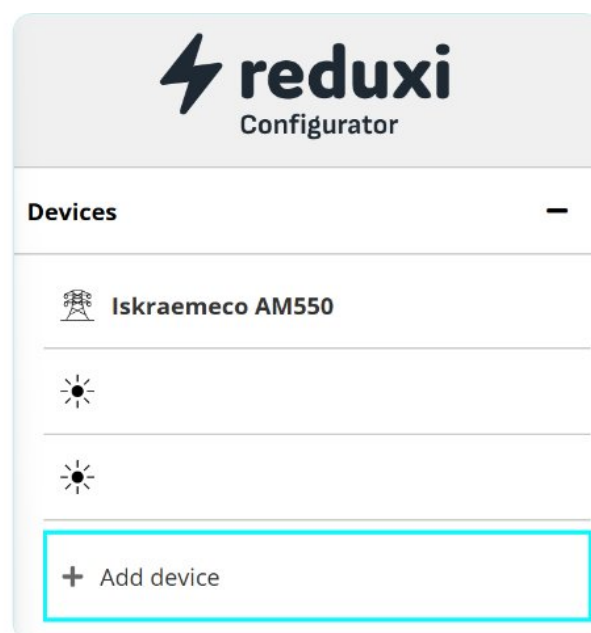
- 1 Click + Add device**

In the left menu the section **Devices** lists all devices (click it if it is collapsed). **+ Add device** sits directly below the list. Do not use **+ Add EEBUS device**.
- 2 Device type**

Select **EV charger**.
- 3 Type**

Select **OCPP 1.6 – JSON**.
- 4 Name and strategies**

Name the device, tick the strategies and click **Next**.



Text description of this image

Screenshot of the Reduxi Configurator sidebar. Header: redux Configurator logo. Section Devices (with a

+ Add device below the device list

Progress indicator: 1 Basic settings, 2 Communication channel, 3 Advanced settings

Basic settings

Device type *

Type *

Name *

Back Next

Text description of this image

Screenshot of the Reduxi Configurator add device wizard, step 1 Basic settings. Progress indicator with three

Basic settings: EV charger, OCPP 1.6 - JSON

6.2 Communication settings

The second step sets up the communication channel for OCPP. First enter the **Device identifier**, the charge point identity you copied from the charger ([Point 4.1](#)). The **OCPP server URL** is generated by the Reduxi Controller and shown in the communication channel. Copy it into the backend server field of the charger. Example: `ws://192.168.1.200/ocpp/1.6/json/`

Progress indicator: 1 Basic settings, 2 Communication channel, 3 Advanced settings

Communication channel and device configuration

Device identifier *

my_station_ID

Connector *

1

Charger type *

AC

Energy counter

Default

Allocate power to EVSE when EV is not connected to EVSE

Default

Per phase max. current *

Manual override

Per phase max. current manual override

32

In effect when manual override is selected

Forward communication to backend OCPP server

Allow new charging session

Always

Controller OCPP JSON 1.6 URL

ws://192.168.1.200/ocpp/1.6/json

Back Test communication Done

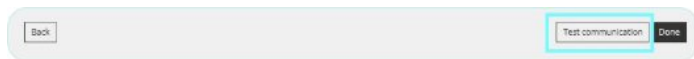
Text description of this image

Screenshot of the Reduxi Configurator add device wizard, step 2 Communication channel (progress indicator:

Communication channel with the OCPP server URL

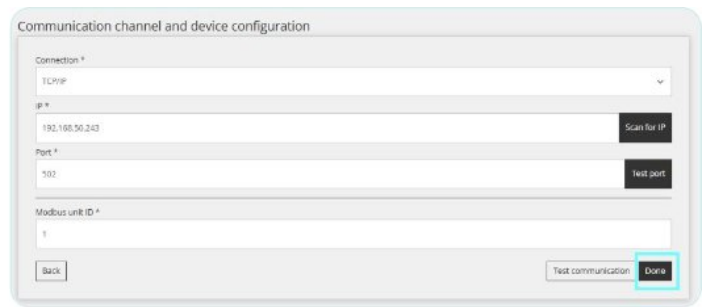
6.3 Test communication

Click **Test communication** at the bottom right of the communication channel. It checks the OCPP connection once and saves nothing. If the result is fine, click **Done**. Only **Done** creates the device.



Text description of this image

Screenshot of the bottom button bar of a Reduxi Configurator form on a light grey background. Left: button Back. Right: button Test communication, marked with a light blue rectangle, and next to it a black button Done.



2. Text description of this image

Screenshot of the Reduxi Configurator form

There are three possible results:



Text description of this image

Screenshot of a dialog titled "Test communication" with a close button (x) at top right, shown over



2. Text description of this image

Screenshot of a dialog titled "Test communication" with a close button (x) at top right, over a



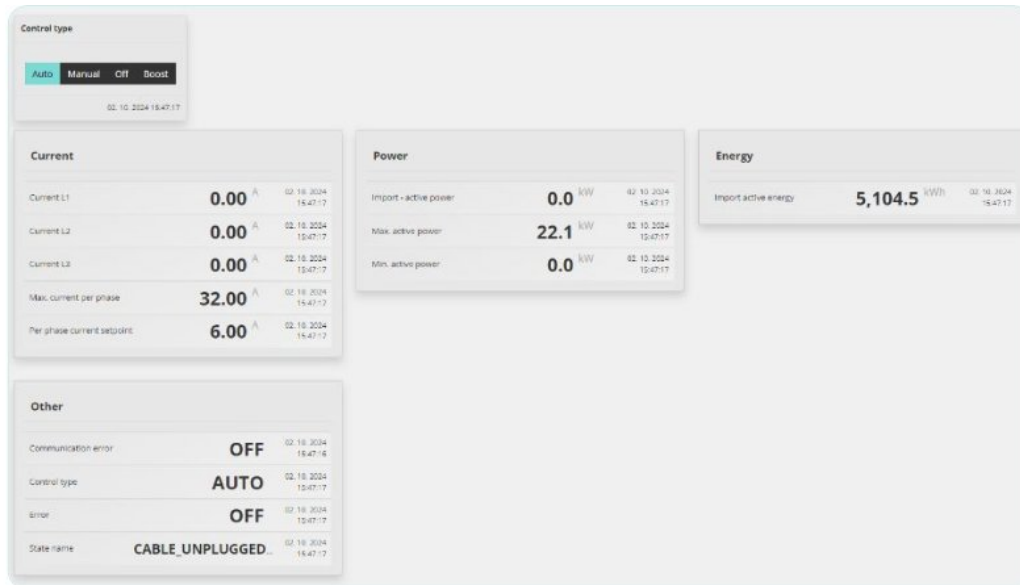
3. Text description of this image

Screenshot of a dialog titled "Test communication" with a close button (x) at top right, shown over

7 Check the readings

7.1 Check the readings

Open **Devices** → **your charger** → **Last measurements**. The values show whether the charger communicates correctly.



Text description of this image

Screenshot of a charger readings page with grey panels. Panel Control type: buttons Auto (selected, light blue), Manual, Off, Boost. Panel Current: 5 rows of current readings (L1, L2, L3, Max. current per phase, Per phase current setpoint). Panel Power: 3 rows of power readings (Import - active power, Max. active power, Min. active power). Panel Energy: 1 row of energy reading (Import active energy). Panel Other: 4 rows of status readings (Communication error, Control type, Error, State name). The State name is CABLE_UNPLUGGED. The timestamp 02.10.2024 15:47:17 is visible in the top right corner.

7.2 Control behaviour

After the charger has been added, it can take part in the Reduxi strategies you ticked in the wizard, see [Strategies for Reduxi controller](#). You can monitor the charger in [the Reduxi Cloud application](#).

✓ Summary

Preparation (Points 1–3): Check the manufacturer information and connect the charger to your Wi-Fi. The charger and the Reduxi Controller must be in the same network.

Etrel charger (Point 4): Open the charger (INCH Pro in the browser, INCH Core in the app), paste the Reduxi server URL into the backend server field and copy the charge point identity.

Add to Reduxi (Points 5–6): Open the Configurator, add an EV charger of type OCPP 1.6 – JSON, enter the charge point identity as device identifier, run Test communication and click Done.

Go live (Point 7): Check the last measurements and select the strategies the charger should take part in.

→ Common issues

ISSUE	SOLUTION
Unable to communicate with device 1	The device identifier in Reduxi is not set or differs from the charge point identity of the charger. Copy the identity from the charger again (Point 4.1) and enter it in the communication channel (Point 6.2).
No device with OCPP 1.6 communication is found	The charger does not reach the OCPP server of the controller. Check the backend server URL in the charger (Point 4.1), that the charger is on Wi-Fi and that charger and controller are in the same network.
I cannot log in to the charger	The admin user name and password are hidden parameters, provided during the installation. Contact support@reduxi.zendesk.com .
The charger loses the connection after a router restart	The IP address of the Reduxi Controller probably changed, so the server URL in the charger is no longer valid. Use a fixed IP address for the controller and update the URL.
Open configurator does not open or stays empty	The tunnel is not active yet. Wait about 30 seconds and check that the controller is online.
Login with <code>admin</code> is rejected	The password was changed during installation. Ask the installer. The Reduxi account password does not work there.
<code>reduxi.local</code> does not load	You are not in the same network. Use the IP address or the tunnel.
Communication test fails, device offline	Check reachability, IP, port <code>1502</code> and unit ID <code>71</code> , and that Modbus is enabled on the inverter.

→ Related articles

Matching guides from the Reduxi knowledge base:



Etrell

Manufacturer website with product information and support



Device setup guides

All step-by-step guides for connecting devices to the Reduxi Controller



Strategies for the Reduxi Controller

Energy manager and other strategies explained